CompassCDS
1-Button Interface Installation and User Guide

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Understanding the 1-Button Interface

The 1-Button plug-in interface enables users to operate gas chromatographs being controlled by the Scion Instruments CompassCDS software and generate results without having to access the CompassCDS software application itself. 1-Button uses the same log-on, audit trail and security features associated with CompassCDS and has been designed to provide plant operator level users with a straightforward and intuitive interface that enables them to quickly set up and run routine product sample analyses and then generate the associated results report with one button click.

The 1-Button interface can be installed and configured by any CompassCDS administrator level user who can then set up fully automated, multi-injection calibrations, followed by verification runs (if required) and unknown sample analyses either as single injections with/without autosampler vial position support or as continuously looping analyses. Once configured, all of these can be run by simply selecting and clicking on the appropriate icon in the GUI.

Installing and Configuring the 1-Button Interface

Installing CompassCDS

The CompassCDS software should be installed and configured in accordance with the procedures described in the CompassCDS software installation guide found in the root folder on the CompassCDS DVD. Once installed, a 1-Button Administrator and a 1-Button Operator user type with accompanying user profiles (Figure 1) should be configured in the Configuration Manager application. It is also recommended that all user profiles be assigned at least a $Year4\$Month2 folder token.

Installing the 1-Button Interface

The 1-Button application can be installed by locating and running the Setup.exe found in the Add-ons\1-Button folder on the CompassCDS DVD. Once the installation has completed, the migration tool must be run to integrate the 1-Button application with CompassCDS. To run this tool, the user should click on the InsertCustomProgramRights.bat file found in the Add-ons\1-Button\migrate folder and then press Enter. Once this tool has been run, it will be possible to assign Administrator and Operator user profile rights from within the Configuration Manager as shown in Figure 2.

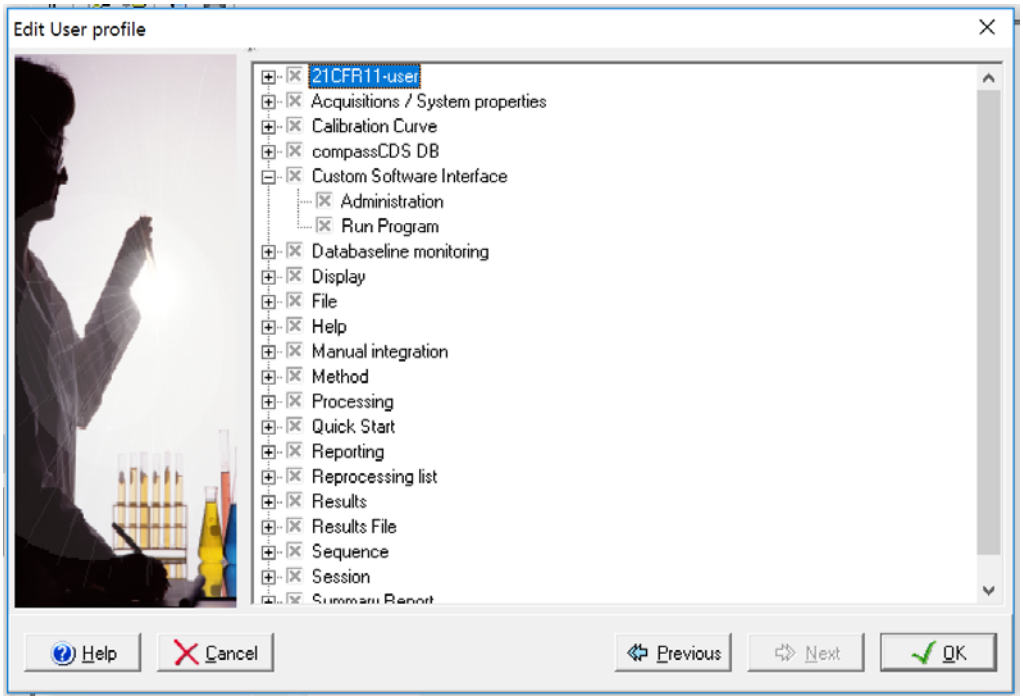


Figure 1 1-Button Administrator level User Profile

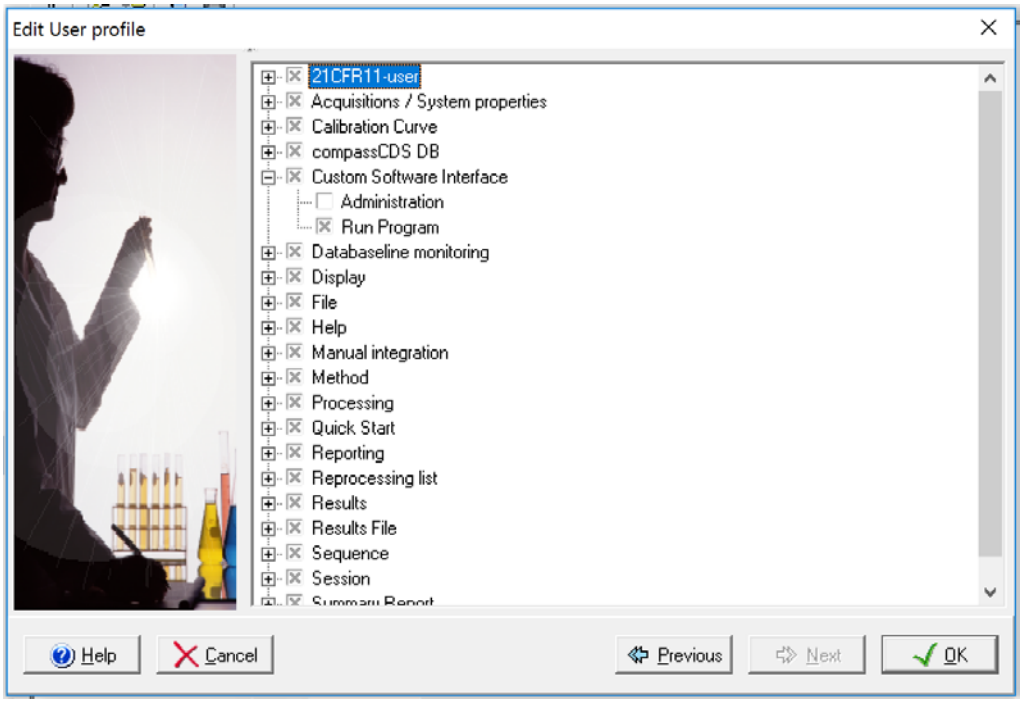


Figure 2 1-Button Operator level User Profile

Logging into the 1-Button Interface as an Administrator

1-Button Administrators can access the 1-Button application by double clicking on the 1-Button desktop icon . This will bring up a login dialogue similar to that shown in Figure 3 below. Administrators can then enter the default CompassCDS Administrator login, select a Group, Project and if required the associated Administrator password. This dialogue will retain the information from the last logged on user.

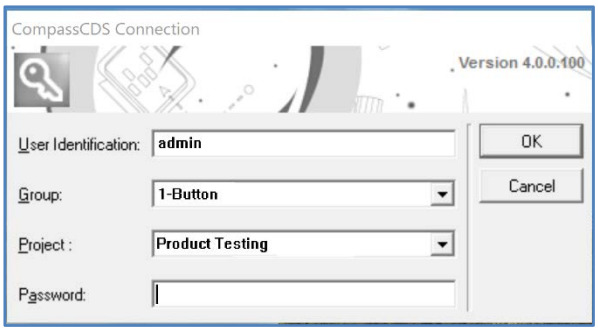
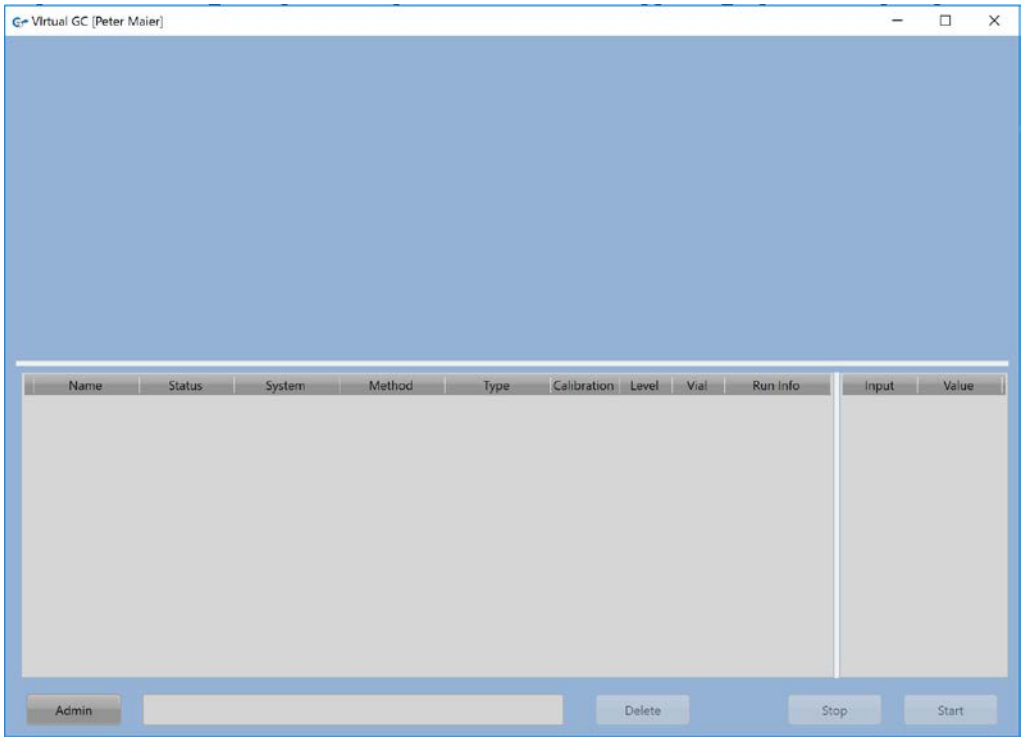


Figure 3 1-Button Administrator Login dialogue

Configuring Analysis Types using the Administration Setup

When logging into the 1-Button application for the first time, a blank GUI similar to the one shown in Figure 4 below will appear.



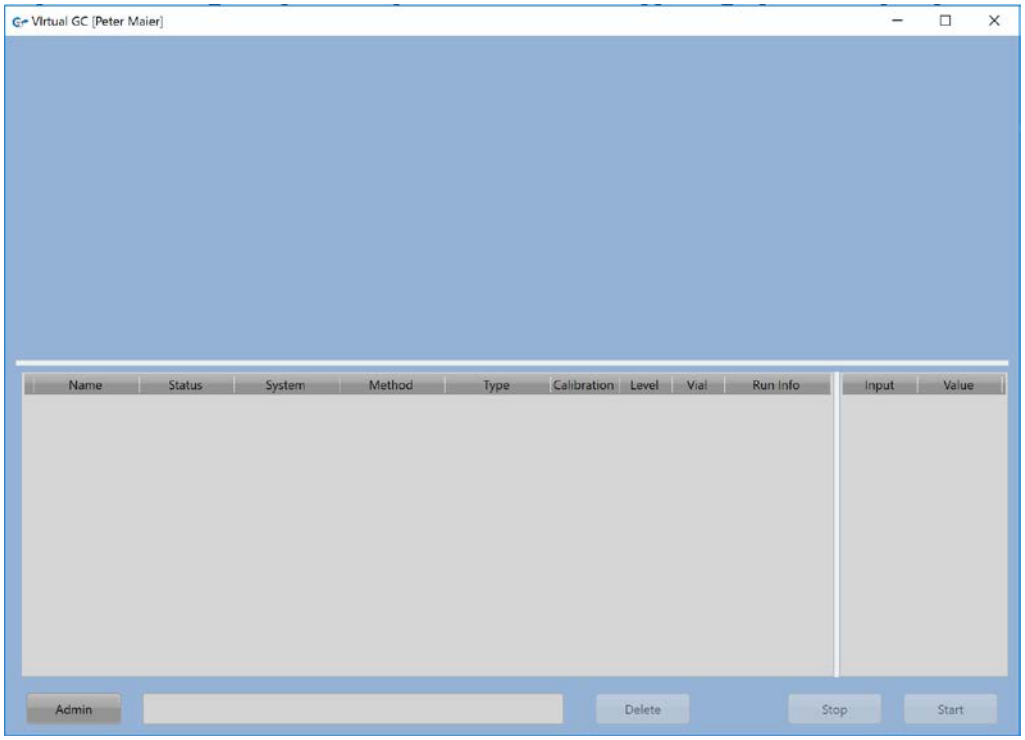
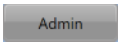


Figure 4 1-Button main GUI

Click the  button to bring up the 1-Button Administration Setup GUI shown in Figure 5.

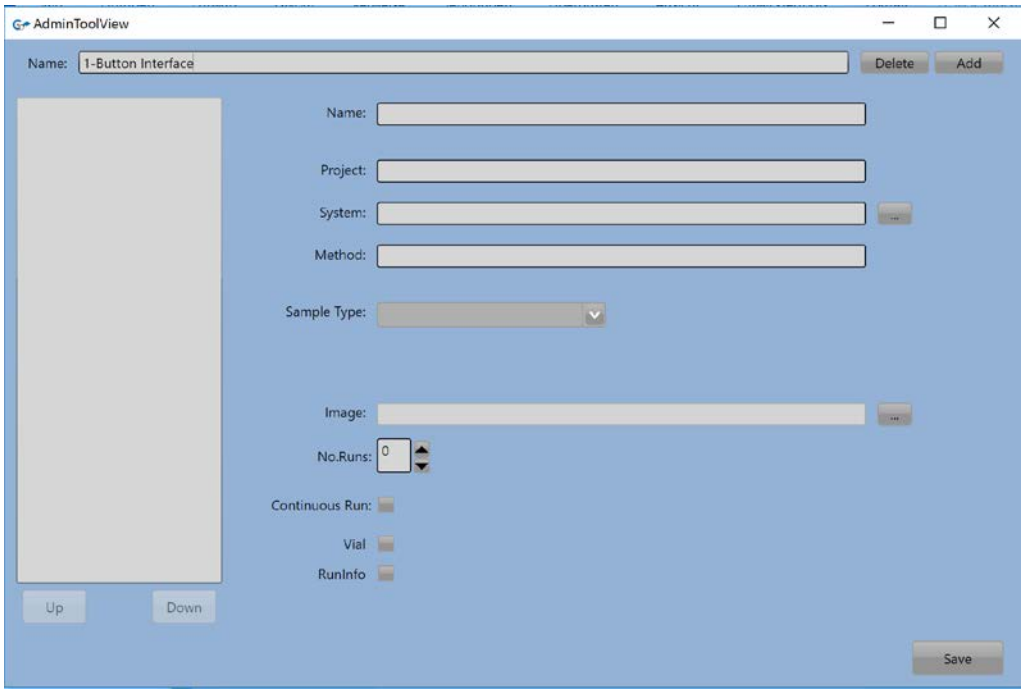


Figure 5 1-Button Setup GUI

A CompassCDS Method (.METH) is the item that needs to be selected in order to create a new analysis type and to be able to populate the Setup fields. It is assumed that the CompassCDS method being selected is complete, i.e., this method contains a Peak ID table, a valid calibration curve, user input variables (if required) and a configured report style. If not, it is still possible to complete the configuration of an analysis type in the 1-Button setup dialogue and finish editing the

CompassCDS method directly in CompassCDS at a later stage. An analysis type is set up from within the Setup Dialogue pane as follows:

1. Click the Add button and enter a name for the analysis, for example, Product QC in the Name: field.
2. Click on the ... icon and select the Method to be used for the analysis.
3. Select the Sample Type (Unknown, Standard, Blank, Control).
4. Select a suitable icon by clicking on the image ... icon and navigating to the icons folder.
5. Select the number of runs per analysis
6. If the analysis involves continuous looping, check this option and enter the wait time (in minutes) between samples
7. Click the Save icon and the analysis name will appear in the left-hand column as shown in the examples displayed in Figure 6.

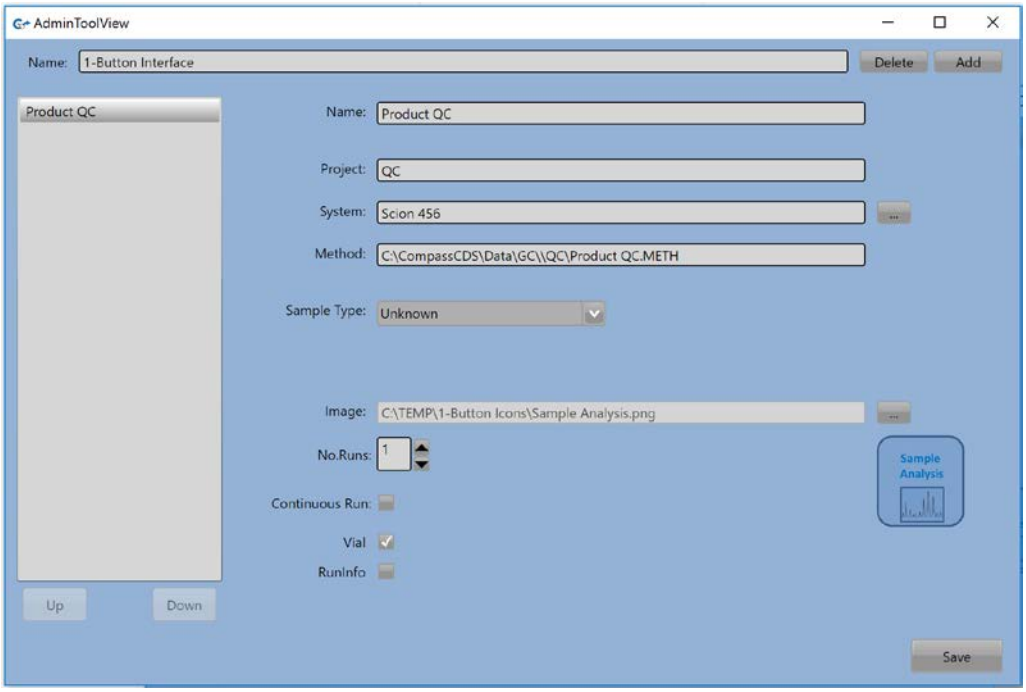


Figure 6 Example Setup for an Unknown Sample analysis

A Multi-level, multi-replicate calibration setup would look similar to the layout shown in Figure 7.

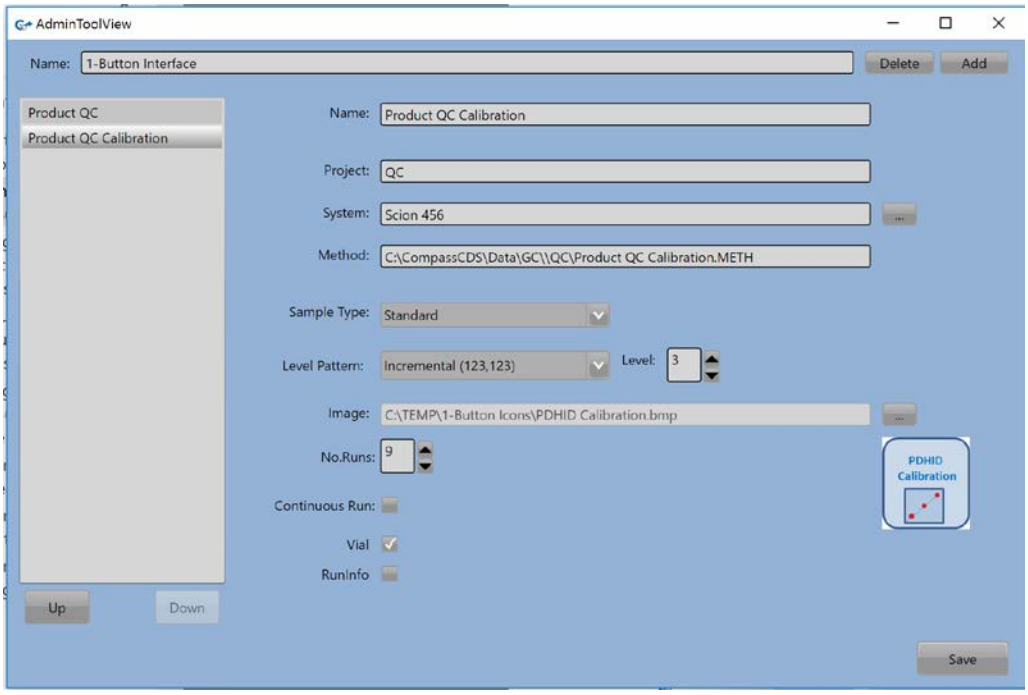


Figure 7 Example Setup for Calibration Standards (3 levels, three replicates per level)

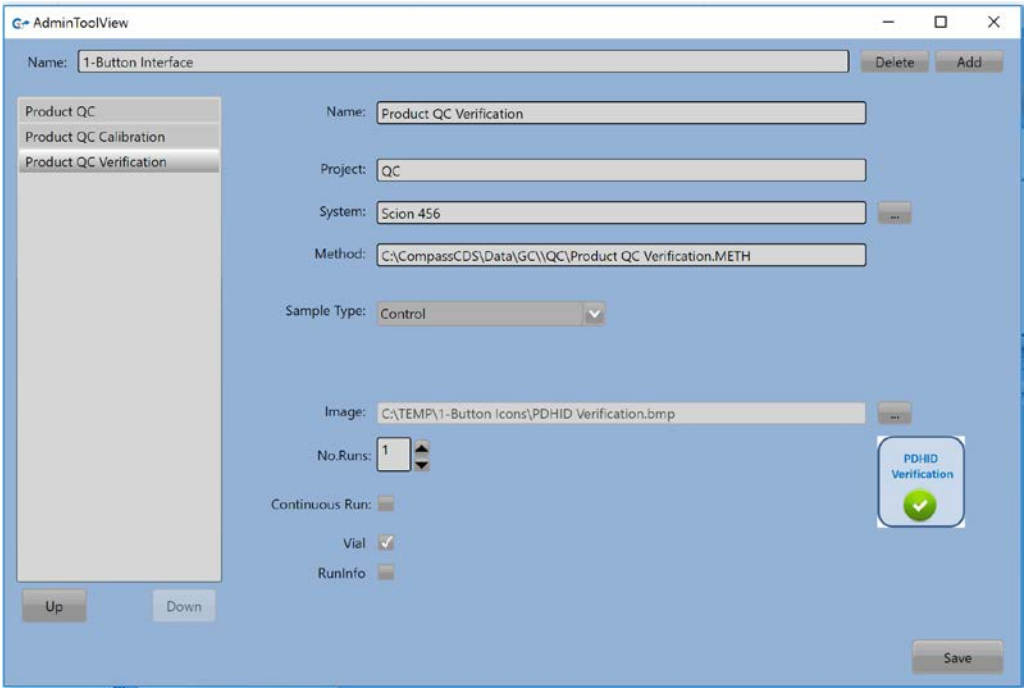


Figure 8 Example Setup for Calibration Verification analysis

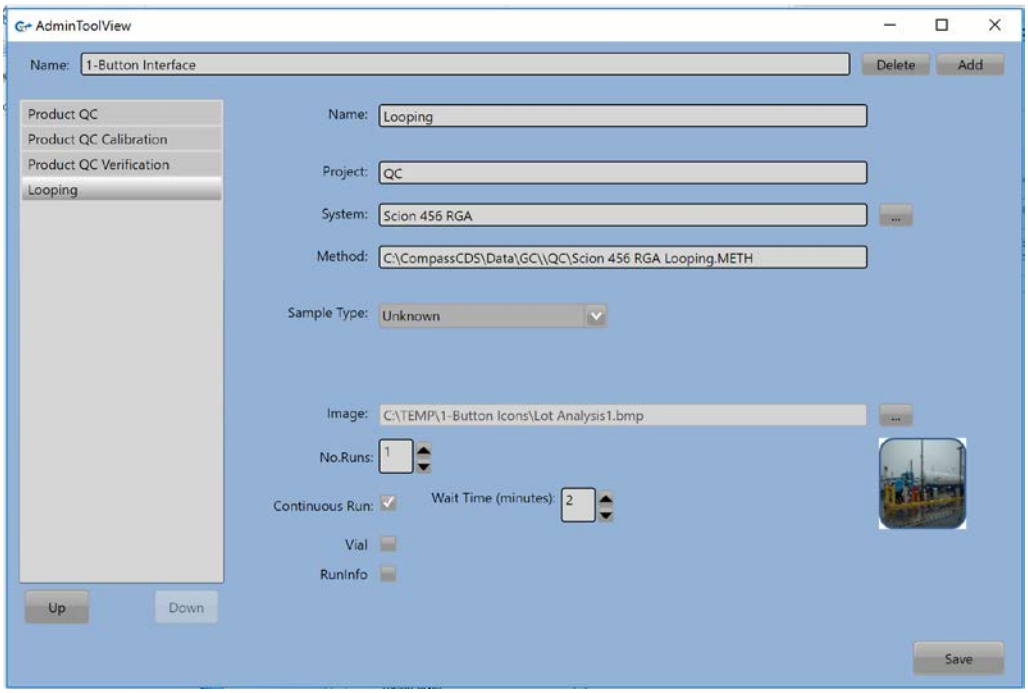


Figure 9 Example Setup Dialogue for a Continuously Looping analysis

Each one of these Setup Dialogue panes is represented by an icon in the 1-Button GUI and it is possible to change the order of these icons using the Up and Down buttons as shown in Figure 10.

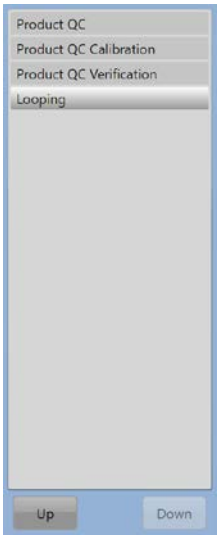


Figure 10 Analysis type icon order list

Clicking on the button will close the Administration setup dialogue and return to the 1-Button main GUI as shown in Figure 11.

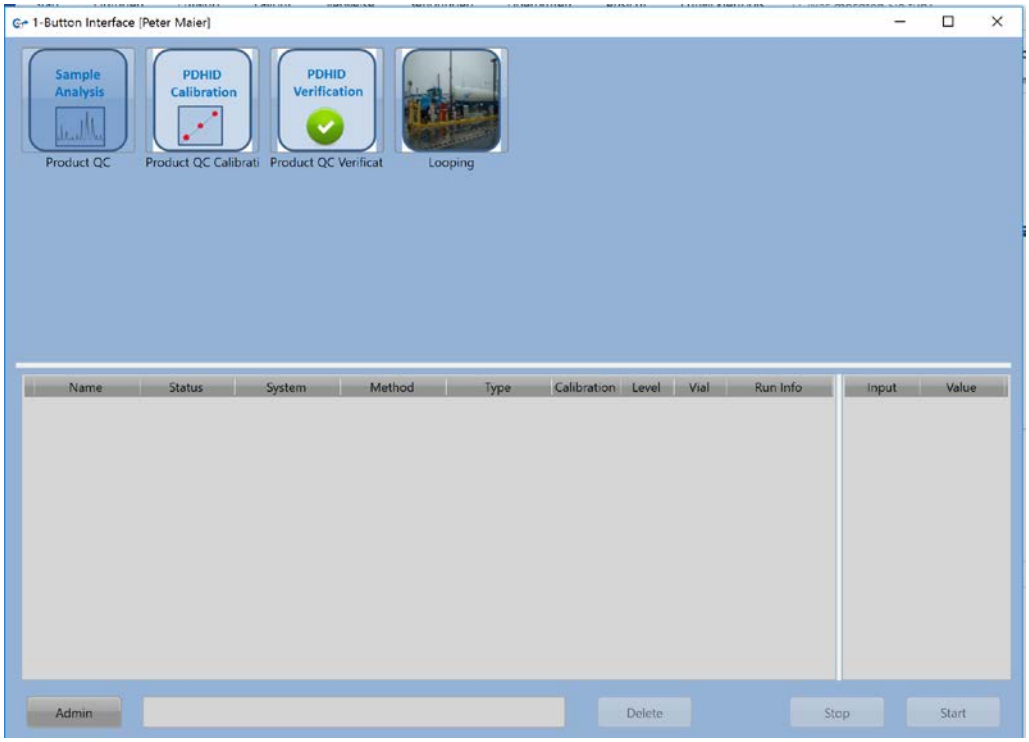


Figure 11 Configured 1-Button main GUI with icons for Product QC, Calibration, Verification and Looping Analyses

Logging into and Running the 1-Button Interface as an Operator

Operators can access the 1-Button application by double clicking on the 1-Button desktop icon . This will bring up the login dialogue shown in Figure 12. Operators can then enter the default operator login User Identification, select a Group, Project and if required the associated operator password. This dialogue will retain the information from the last logged on user.

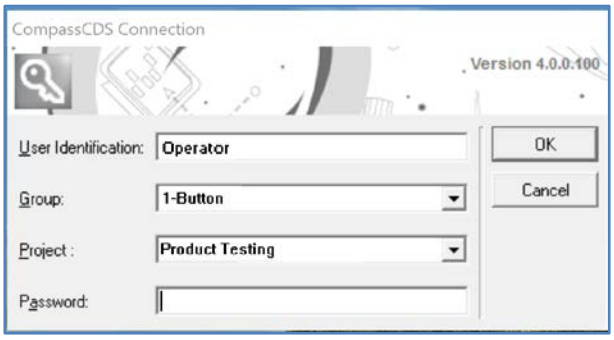


Figure 12 1-Button Operator Login dialogue

The 1-Button main GUI will appear as shown in Figure 13.

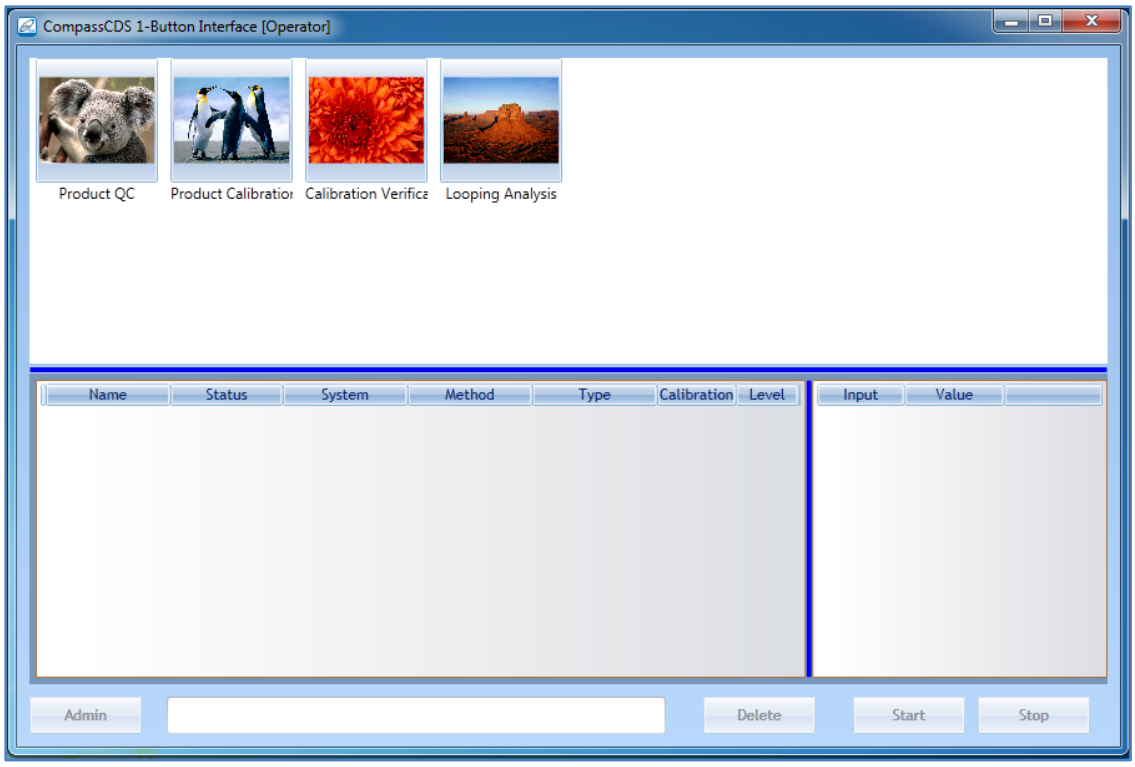


Figure 13 1-Button main GUI with icons for Product QC, Calibration, Verification and Looping analyses

Operators can click on any of the visible icons to load and run pre-configured Analysis types including:

- Product Analyses
- Calibration or re-calibration sequences
- Calibration verification runs
- Looping analyses for continuous sampling applications

In addition, operators can add user input variable information for specific Analysis Types in the right hand pane and have the ability to stop/start/delete runs.

Executing Unknown Sample runs

Routine product sample QC analyses can be setup and run using the 1-Button interface. The 1-Button GUI makes this a simple operation that requires clicking on the following icon either once for a single analysis or multiple times if more than one sample is to be run as shown in the example below.

To initiate a Product QC run, the operator should click once on the Product QC

icon and a single line the GUI as shown in figure 6.1 below. Two mandatory user input variables, (Batch No: and LIMS No:) have been added to this method and the operator will be required to enter the relevant information in order to proceed. Once a Batch and LIMS number have been entered, the operator can click the

button at this point and the analyses will proceed. Running analyses can be viewed by logging into CompassCDS and navigating to the Systems view.

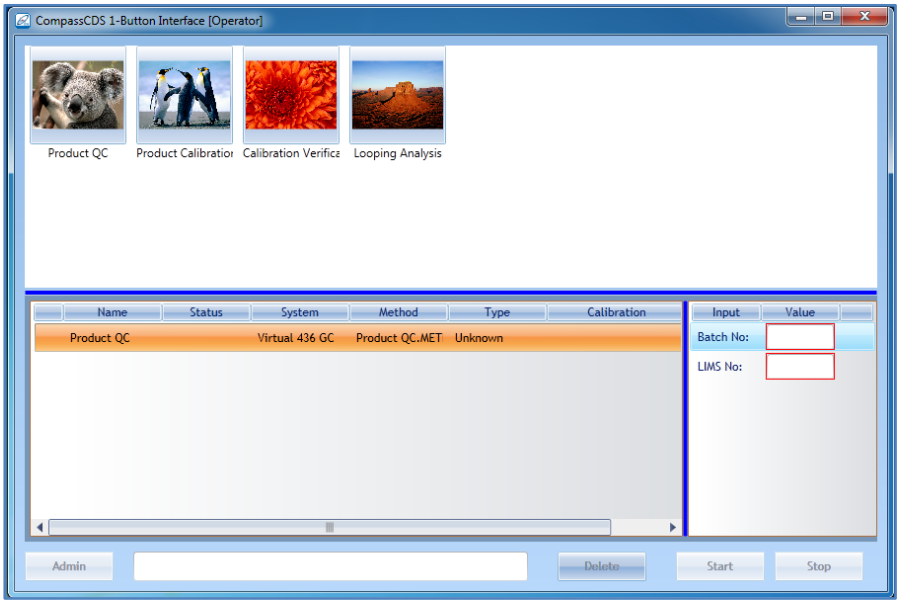


Figure 14 Example Product QC analysis with mandatory user entry variables

Once the run completes, the corresponding line in the 1-Button GUI will disappear and the resultant chromatogram can be reviewed (if required) in the CompassCDS Data view.

Executing Calibration and Verification runs

To generate calibration (or re-calibration) curves and to then automatically calculate the percent recovery values for each component being analyzed, an operator simply needs to click once on the Product Calibration and once on the Calibration Verification icon. A calibration sequence of 9 runs followed by a verification run will automatically be added to the GUI as shown in Figure 15. The operator can click the button and at this point and the displayed analyses will proceed.

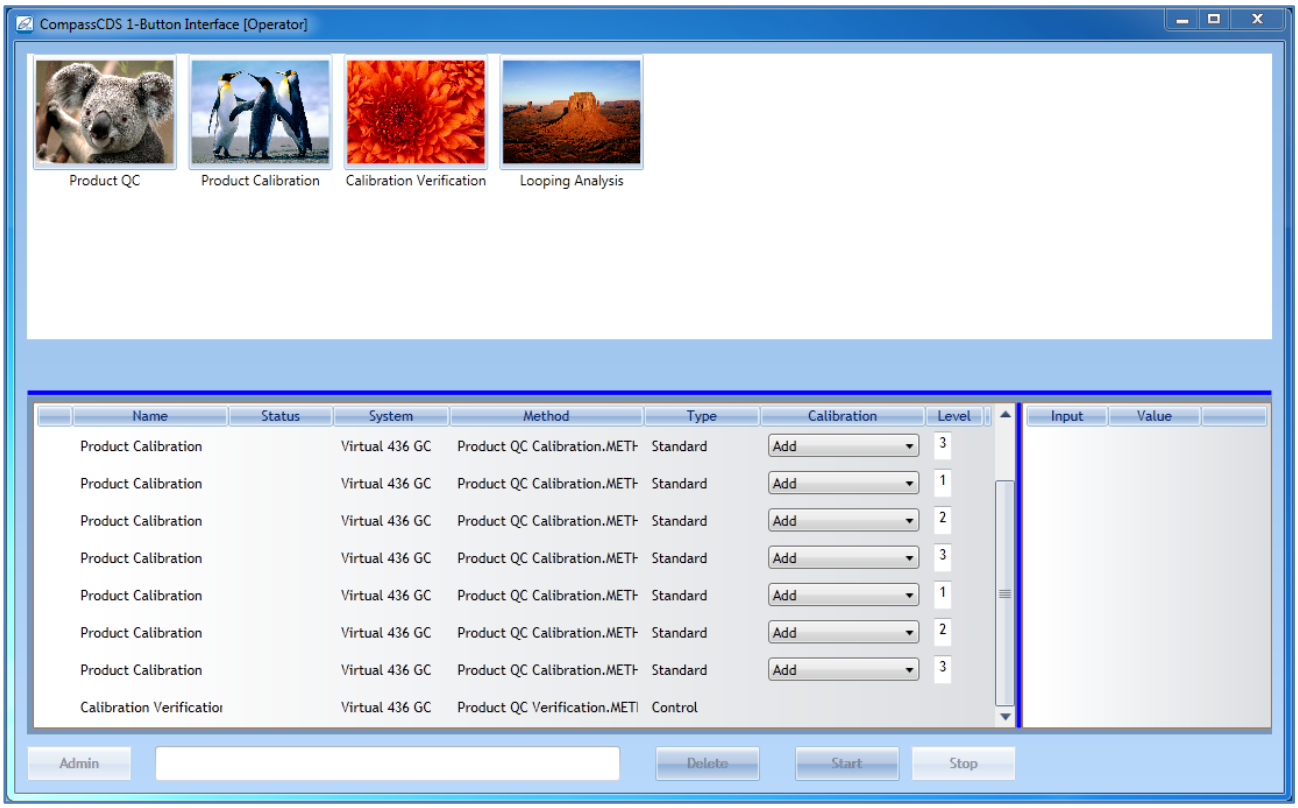

CompassCDS 1-Button Interface [Operator]
Product QC
Product Calibration
Calibration Verification
Looping Analysis
Name
Status
System
Method
Type
Calibration
Level
Input
Value
Product Calibration Virtual 436 GC Product QC Calibration.METH Standard Add 3
Product Calibration Virtual 436 GC Product QC Calibration.METH Standard Add 1
Product Calibration Virtual 436 GC Product QC Calibration.METH Standard Add 2
Product Calibration Virtual 436 GC Product QC Calibration.METH Standard Add 3
Product Calibration Virtual 436 GC Product QC Calibration.METH Standard Add 1
Product Calibration Virtual 436 GC Product QC Calibration.METH Standard Add 2
Product Calibration Virtual 436 GC Product QC Calibration.METH Standard Add 3
Calibration Verificatio Virtual 436 GC Product QC Verification.METI Control
Admin
Delete
Start
Stop

Figure 15 Three level, 3 replicate calibration sequence (9 runs) with a verification run

Executing Continuously Looping Analyses

To set up a continuously looping analysis, an operator simply needs to click once on the Looping Analysis icon. A line will automatically be added to the GUI as shown in Figure 16. The operator can click the button and at this point and the displayed analysis will proceed until the operator clicks the Stop button OR another sample such as a Product QC is added, in which case the continuously looping analysis will pause at the end of the current run and the added sample will then run. Once the Product QC analysis has completed, the looping analysis will continue once more.

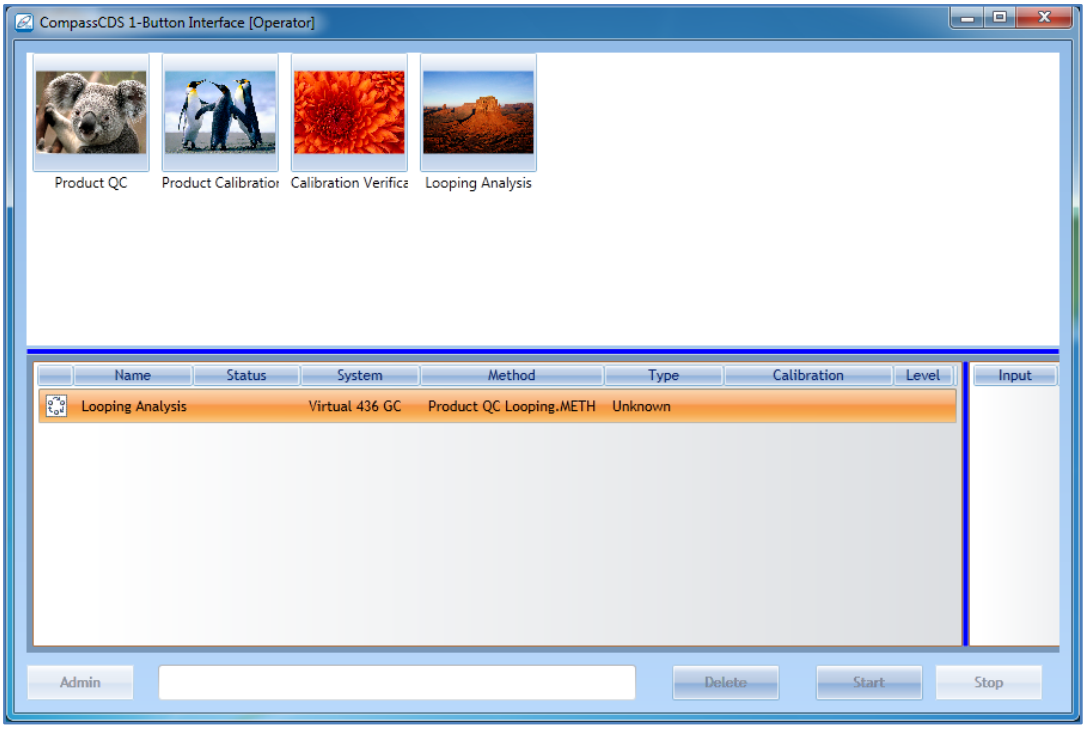


Figure 16 Continuously looping run